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PROJECT REFERENCE NO.	SHEET NO.
W-5601EJ	Sig. 1

4 Phase
Fully Actuated
US 1 Alternate (South Main St) CLS

PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+6	02+6	02+5	04+8	FLASH
11	~~-~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	G	G	R	Y
41	R	R	R	G	R
42	R	R	R	G	R
51	~~R~~	~~R~~	~~-~~	~~R~~	~~R~~
61, 62	G	G	R	R	Y
81, 82	R	R	R	G	R
P21, P22	DW	W	W	DW	DRK
P61, P62	W	W	DW	DW	DRK
P81, P82	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	0	2-4-2	-	1	Y	Y	-	-	3	-	-
2A	6X6	70	EXISTING	-	2	Y	Y	-	-	-	-	-
2B	6X6	70	EXISTING	-	2	Y	Y	-	-	-	-	-
4A	6X60	+13	2-4-2	-	4	Y	Y	-	-	3	-	-
4B	6X60	+13	2-4-2	-	4	Y	Y	-	-	-	-	-
5A	6X60	0	2-4-2	-	5	Y	Y	-	-	-	-	-
5B	6X60	+13	2-4-2	-	5	Y	Y	-	-	15	-	-
6A	6X6	70	EXISTING	-	6	Y	Y	-	-	-	-	-
6B	6X6	70	EXISTING	-	6	Y	Y	-	-	-	-	-
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	10	-	-

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. The order of phase 1 and phase 5 may be reversed, but not phase 1 and phase 5 shall not operate simultaneously.
4. Set all detector units to presence mode.
5. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
9. Pavement markings are existing unless otherwise shown.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. Closed loop system data:
    Controller Asset #: 2221.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Fire Hydrant	
N/A	Curb Ramp	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	7	10	7	7	10	7
Extension 1 *	2.0	3.0	2.0	2.0	3.0	2.0
Max Green 1 *	30	90	40	50	90	40
Yellow Clearance	3.0	3.8	3.6	3.0	3.9	3.5
Red Clearance	2.9	2.1	2.5	2.8	1.9	2.8
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	-	-	7	7
Don't Walk 1	-	7	-	-	22	17
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Proposed Crosswalk and Stopbar Locations

Signal Upgrade

Prepared in the Offices of: Transportation Mobility and Safety Division, Signal Design Section, 750 N.Greenfield Pkwy,Garner,NC 27529

US 1A (S. Main Street) at Wake Pointe Shopping Center (Wal-Mart) and Wake Forest Professional Center

Division 5 Wake County Wake Forest

PLAN DATE: January 2017 REVIEWED BY:
PREPARED BY: C.E. Carter REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: 1B9D4E5A5A4F4E... 3/2/2017
SIGNATURE DATE

SIG. INVENTORY NO. 05-2221

02-MAR-2017 12:58
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